



caBIG

*cancer Biomedical
Informatics Grid*



Proteomics LIMS

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Fox Chase Cancer Center

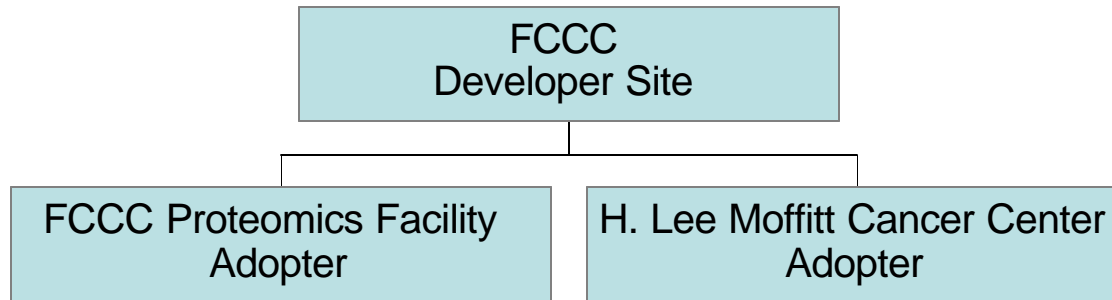
Philadelphia, PA



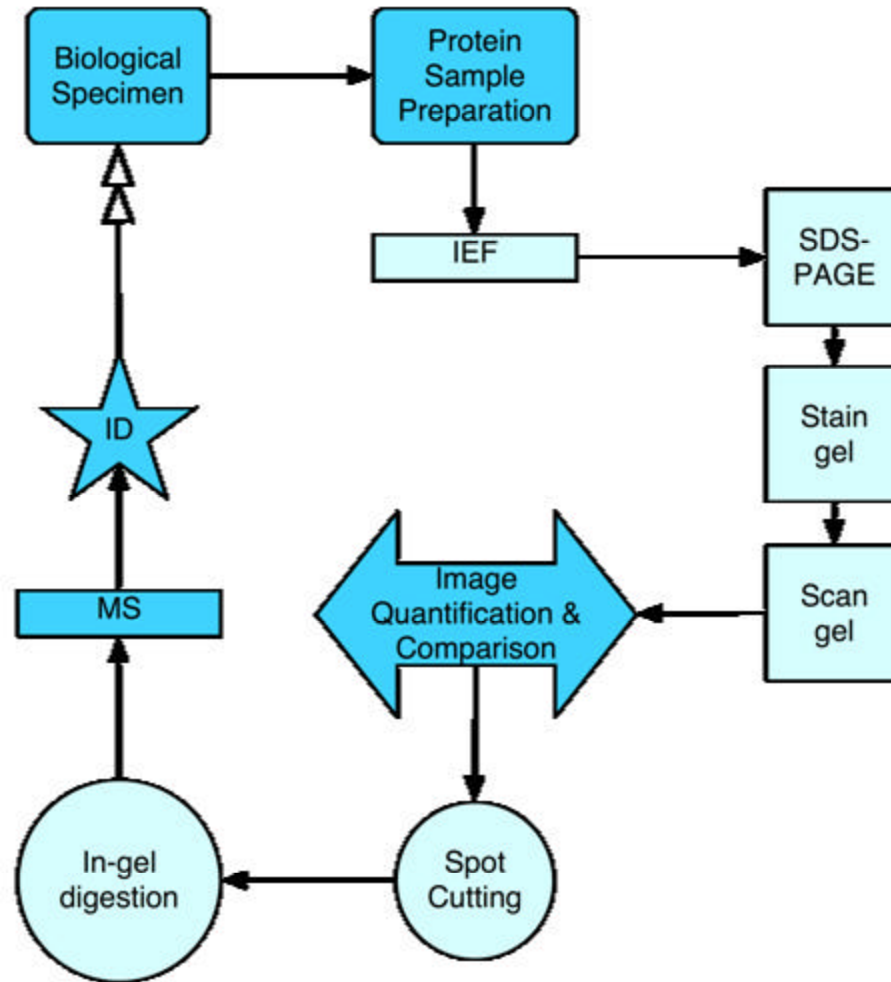
caBIG

*cancer Biomedical
Informatics Grid*

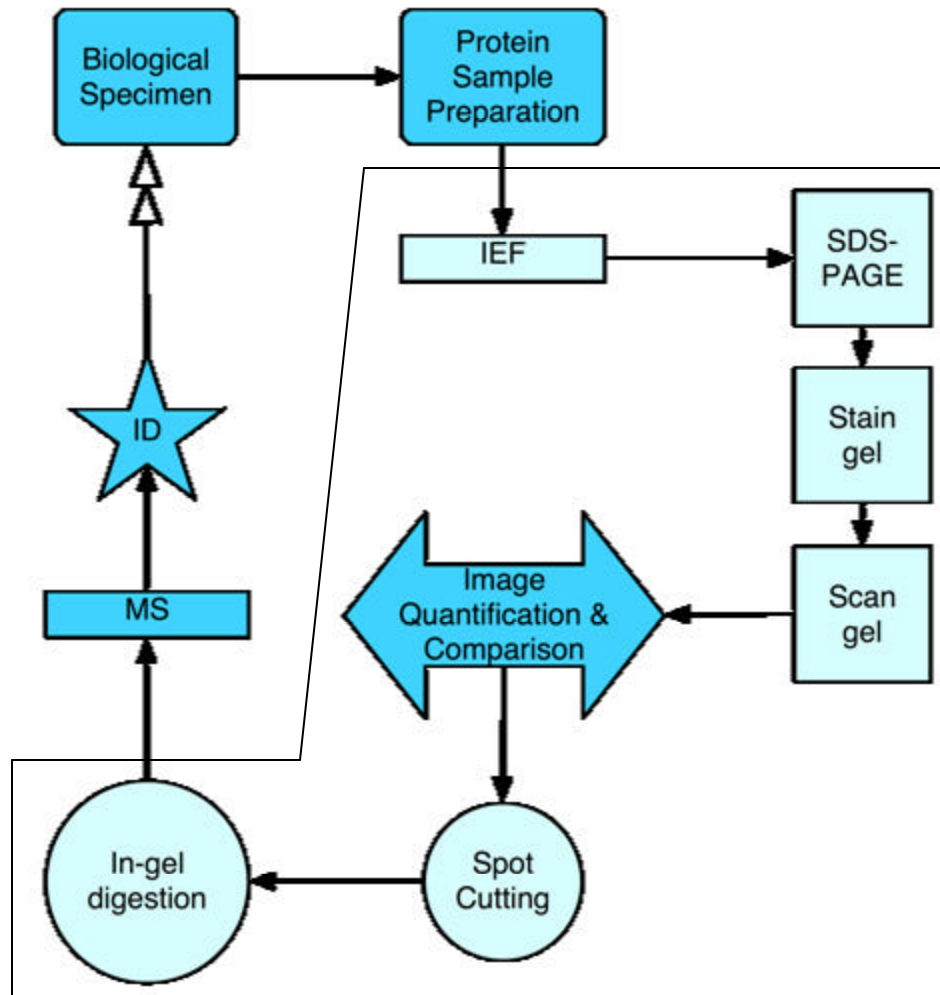
Developer-Adopter Relations



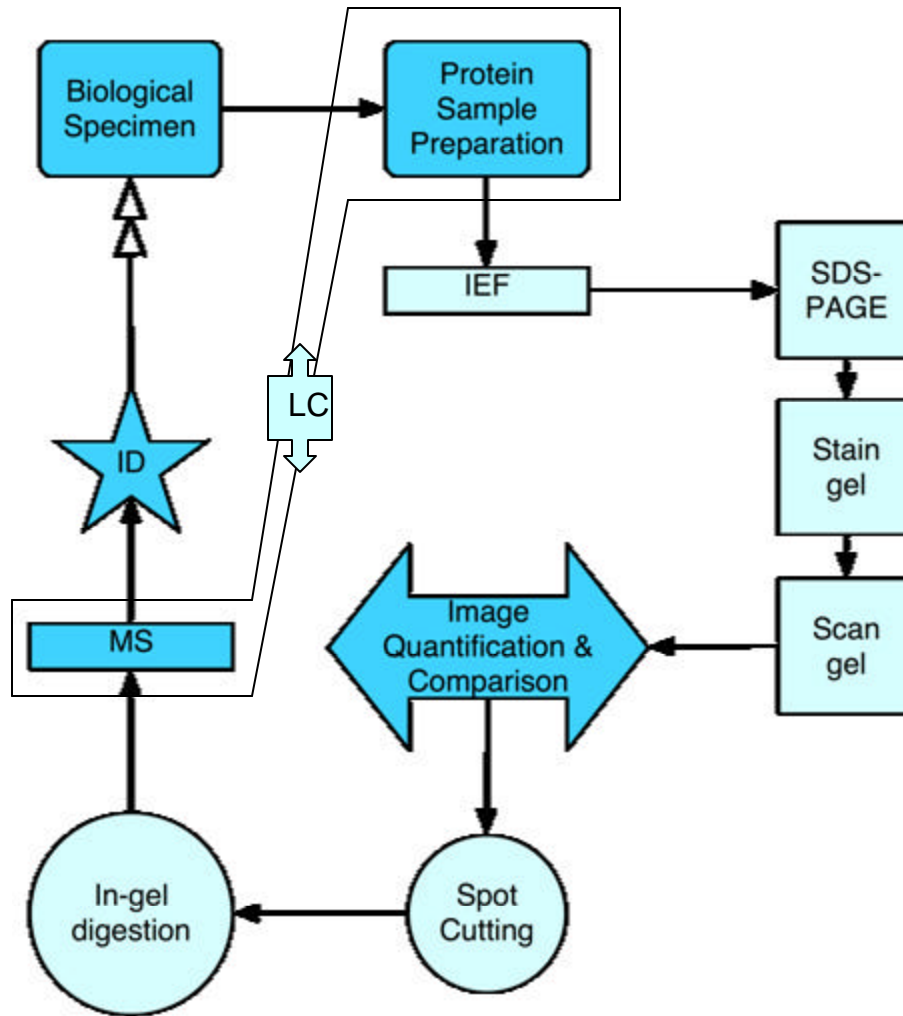
Proteomics Lab Workflow



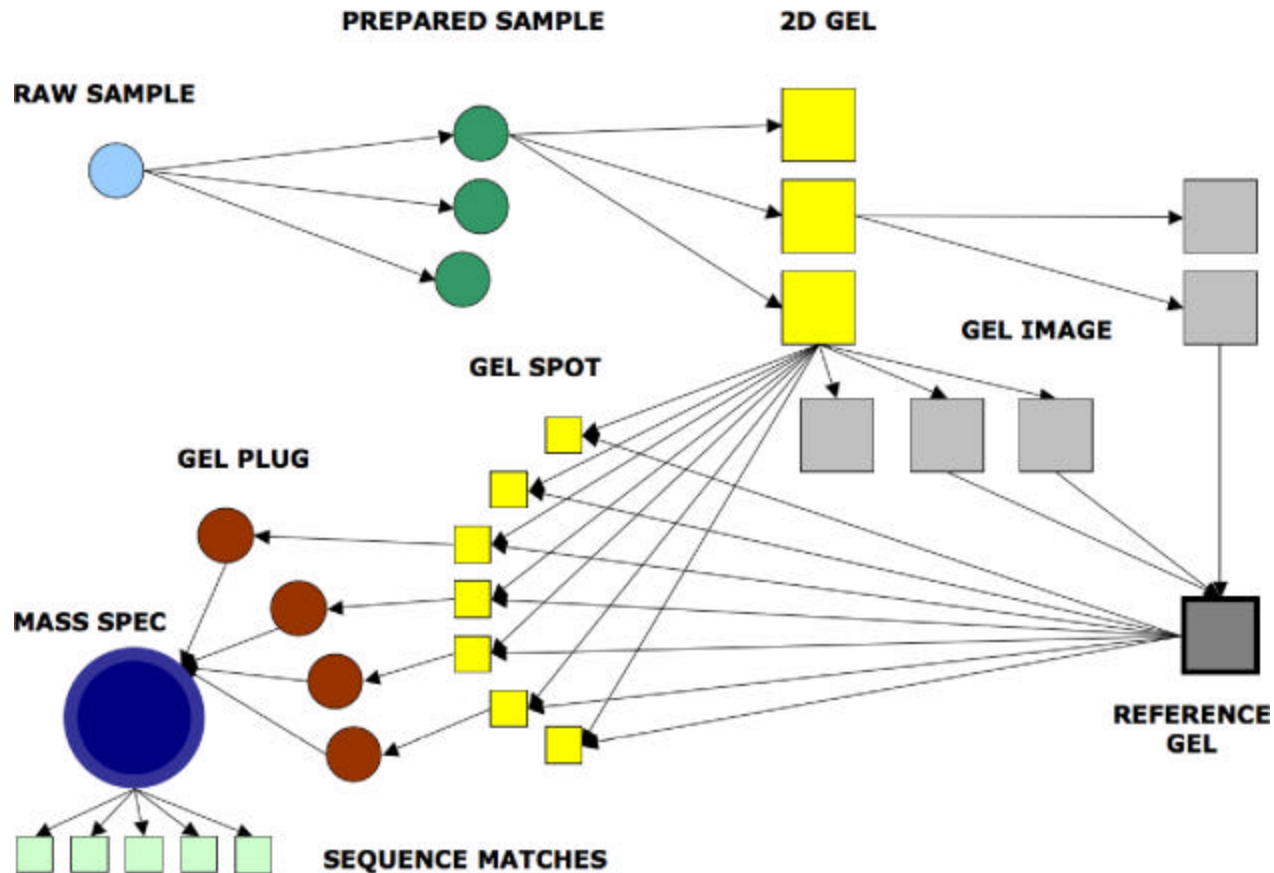
Proteomics Lab Workflow



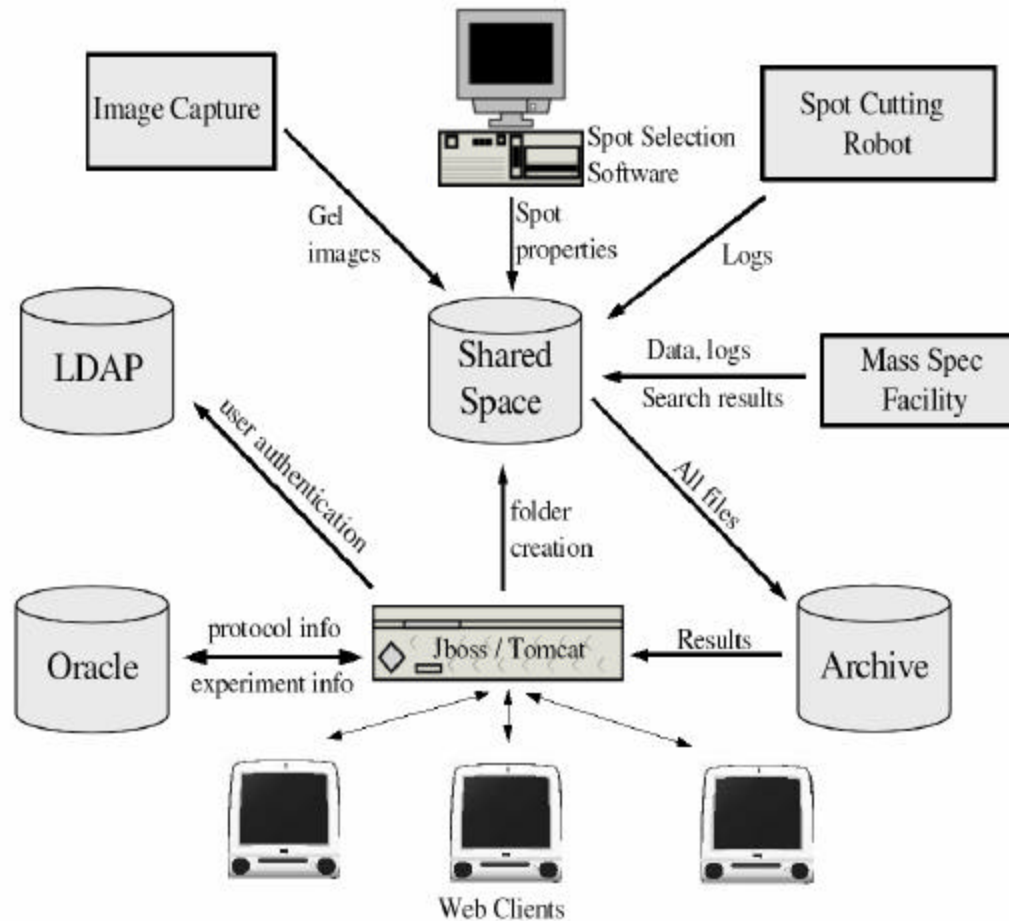
Proteomics Lab Workflow



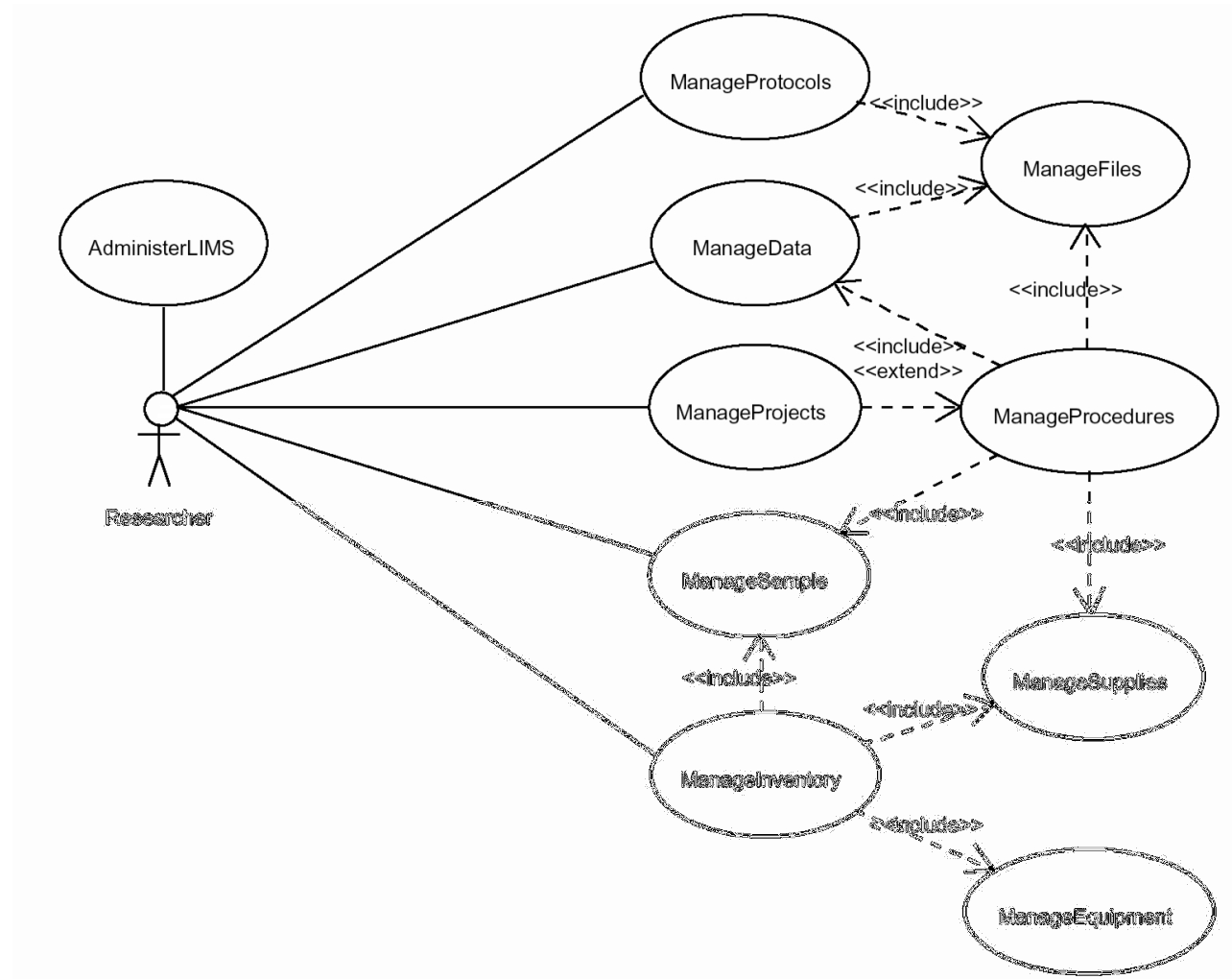
Overview of Data Flow



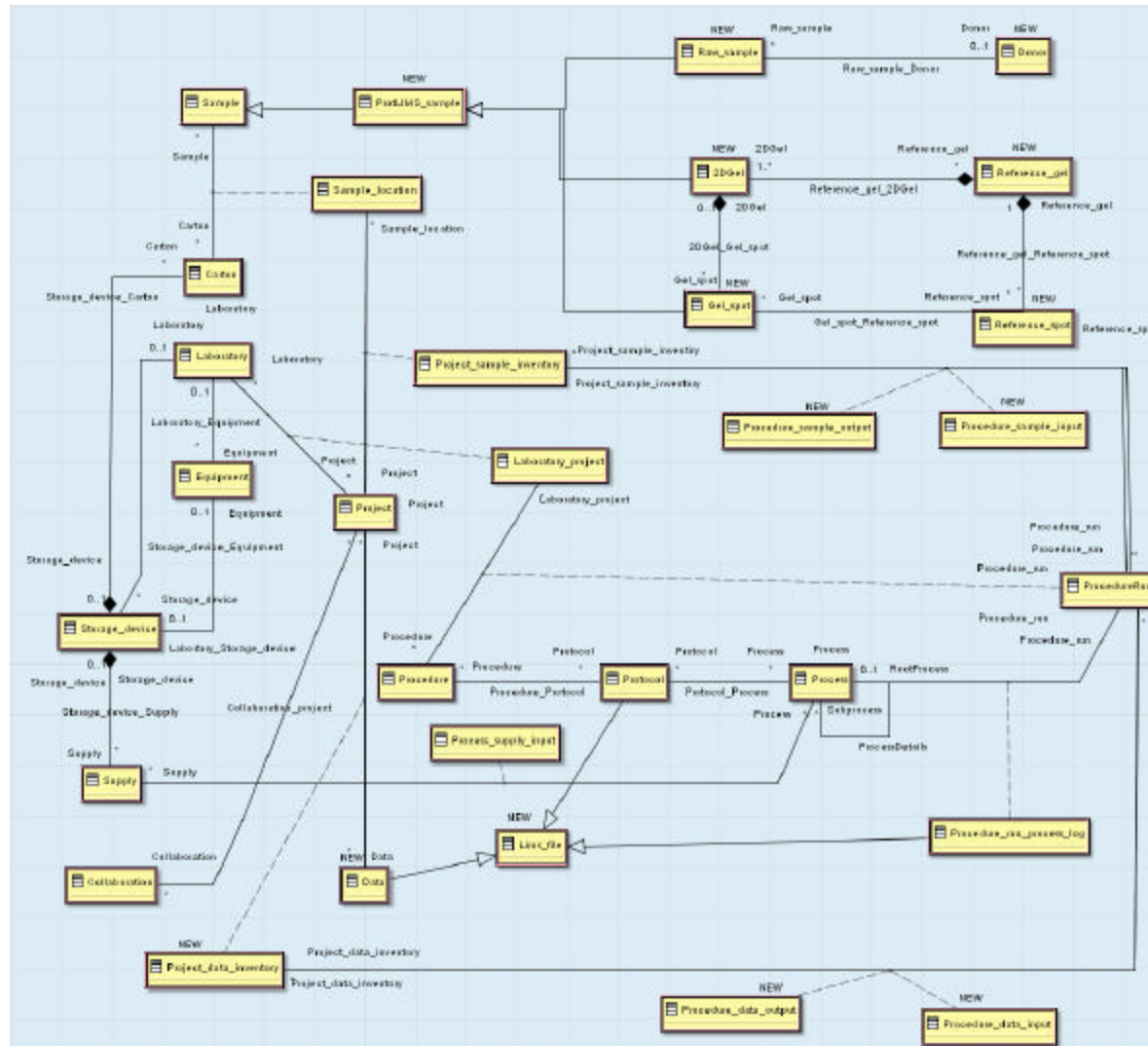
Overview of Deployment



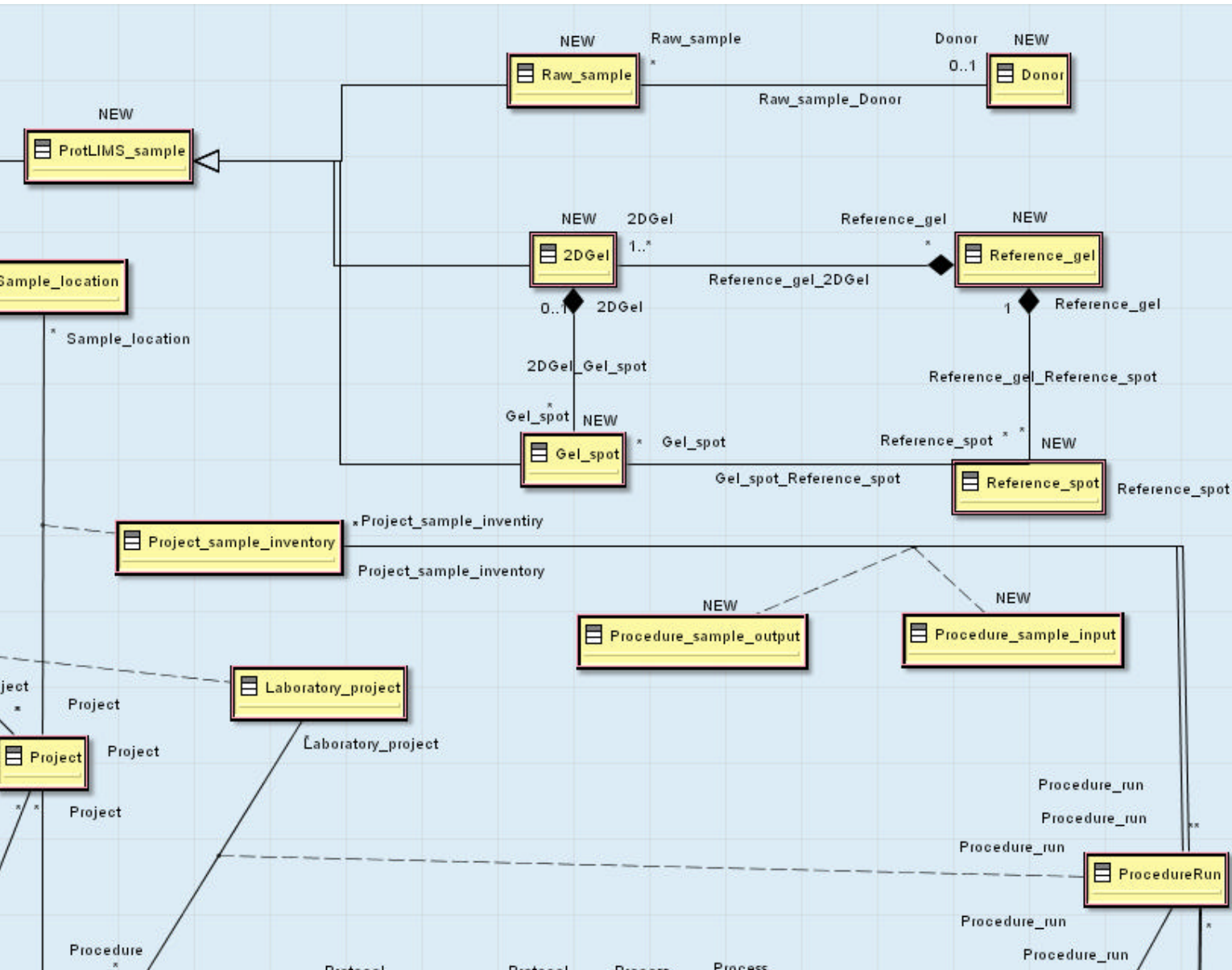
Main Use Case



Main Class Diagram



Main Class Diagram - Samples



Samples and Files

Browse Samples

*** ProtLIMS ***

Admin **Samples & Files** Projects

*** Samples ***

- Raw Samples
- Generic Samples
- 2D Gels
- Reference Gels
- Sample Spots

*** Files ***

- Protocol files
- Gel images
- Data files

Browse samples

Register new sample via [web interface](#) or upload sample information from file

no file selected

Identification	Investigator	Comments	
A2780_Gleevec_0hr_1	Xin-Ming Li		link
A2780_Gleevec_6hrs_1	Xin-Ming Li		link
A2780_Gleevec_24hrs_1	Xin-Ming Li		link
A2780_Gleevec_0hr_2	Xin-Ming Li	Replicates	link
A2780_Gleevec_6hrs_2	Xin-Ming Li	Replicates	link
A2780_Gleevec_24hrs_2	Xin-Ming Li	Replicates	link

LIMS support

Samples and Files

Creating a Raw Sample Record

*** ProtLIMS ***

Admin **Samples & Files** Projects

Sample type: RAW SAMPLE

*** Samples *** Raw Samples Generic Samples 2D Gels Reference Gels Sample Spots *** Files *** Protocol files Gel images Data files	Identification*	<input type="text"/>	Description	<input type="text"/>
	Investigator	<input type="text"/>	Sample collection	<input type="text"/>
	Volume	<input type="text"/> <input type="text"/>	Material type	<input type="text"/>
	Concentration	<input type="text"/> <input type="text"/>	Species	<input type="text"/>
	Collection date	<input type="text"/>	Carton*	<input type="text"/>
	Expiration date	<input type="text"/>	Row	<input type="text"/>
	Sample source	<input type="text"/>	Column	<input type="text"/>
	Processing details	<input type="text"/>	Transport method	<input type="text"/>
	Report	<input type="text"/>	Comments	<input type="text"/>

Submit

Test OK

LIMS support

Samples and Files

Drop-down menus - Sample Volume

*** ProtLIMS ***

Admin Samples & Files Projects

Sample type: RAW SAMPLE

*** Samples ***

Raw Samples

Generic Samples

2D Gels

Reference Gels

Sample Spots

*** Files ***

Protocol files

Gel images

Data files

Identification*

Investigator

Volume

Concentration

Collection date

Expiration date

Sample source

Processing details

Report

Description

Sample collection

Material type

Species

Carton*

Row

Column

Transport method

Comments

Submit

Test OK

LIMS support

Samples and Files

Drop-down menus - Sample Concentration

*** ProtLIMS ***

Admin **Samples & Files** Projects

Sample type: RAW SAMPLE

*** Samples ***

- Raw Samples
- Generic Samples
- 2D Gels
- Reference Gels
- Sample Spots

*** Files ***

- Protocol files
- Gel images
- Data files

Identification*

Investigator

Volume

Concentration

Collection date

Expiration date

Sample source

Processing details

Report

Description

Sample collection

Material type

Species

Carton*

Row

Column

Transport method

Comments

Submit

Test: OK

LIMS support

Samples and Files

Drop-down menus - Sample Collection

*** ProLIMS ***

Admin Samples & Files Projects

Sample type: RAW SAMPLE

*** Samples ***

Raw Samples

Generic Samples

2D Gels

Reference Gels

Sample Spots

*** Files ***

Protocol files

Gel images

Data files

Identification*

Investigator

Volume

Concentration

Collection date

Expiration date

Sample source

Processing details

Report

Description

Sample collection Ovarian Cancer Gleevec

Material type

Species

Carton*

Row

Column

Transport method

Comments

Submit

Test OK

LIMS support

Samples and Files

Drop-down menus - Material Type

*** ProLIMS ***

Admin Samples & Files Projects

Sample type: RAW SAMPLE

Identification*	<input type="text"/>	Description	<input type="text"/>
Investigator	<input type="text"/>	Sample collection	<input type="text"/>
Volume	<input type="text"/>	Material type	<input type="text" value="cell culture"/>
Concentration	<input type="text"/>	Species	<input type="text"/>
Collection date	<input type="text"/>	Carton*	<input type="text"/>
Expiration date	<input type="text"/>	Row	<input type="text"/>
Sample source	<input type="text"/>	Column	<input type="text"/>
Processing details	<input type="text"/>	Transport method	<input type="text"/>
Report	<input type="text"/>	Comments	<input type="text"/>

Submit

Test OK

*** Samples ***

- Raw Samples
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- Reference Gels
- Sample Spots

*** Files ***

- Protocol files
- Gel images
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LIMS support

Samples and Files

Drop-down menus - Species of Sample Origin

*** ProtLIMS ***

Admin Samples & Files Projects

Sample type: RAW SAMPLE

Identification*

Investigator

Volume

Concentration

Collection date

Expiration date

Sample source

Processing details

Report

Description

Sample collection

Material type

Species

Carton*

Row

Column

Transport method

Comments

Submit

Test OK

*** Samples ***

Raw Samples

Generic Samples

2D Gels

Reference Gels

Sample Spots

*** Files ***

Protocol files

Gel images

Data files

LIMS support

Samples and Files

Drop-down menus - Sample Source

*** ProtLIMS ***

Admin Samples & Files Projects

Sample type: RAW SAMPLE

Identification*

Investigator

Volume

Concentration

Collection date

Expiration date

Sample source

Processing details

Report

Description

Sample collection

Material type

Species

Carton*

Row

Column

Transport method

Comments

Submit

Test: OK

*** Samples ***

Raw Samples

Generic Samples

2D Gels

Reference Gels

Sample Spots

*** Files ***

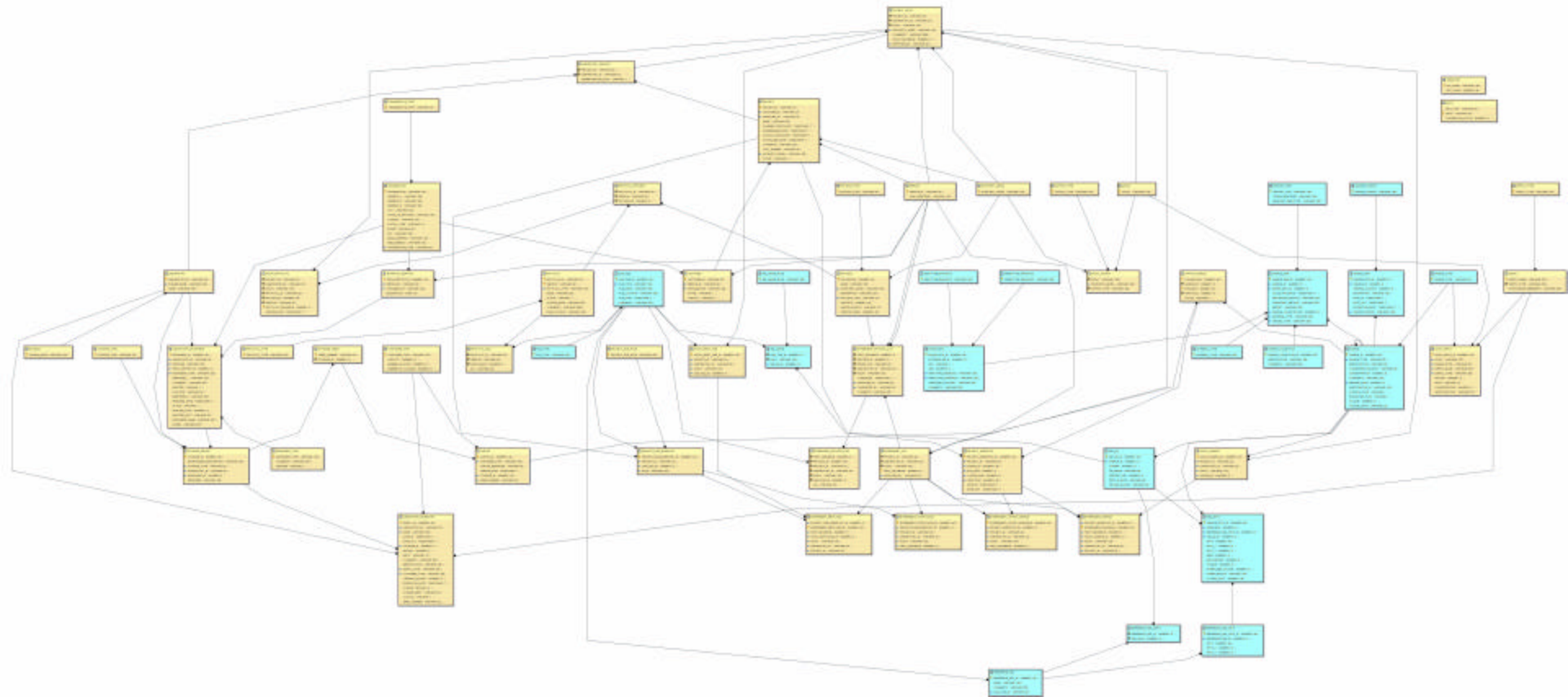
Protocol files

Gel images

Data files

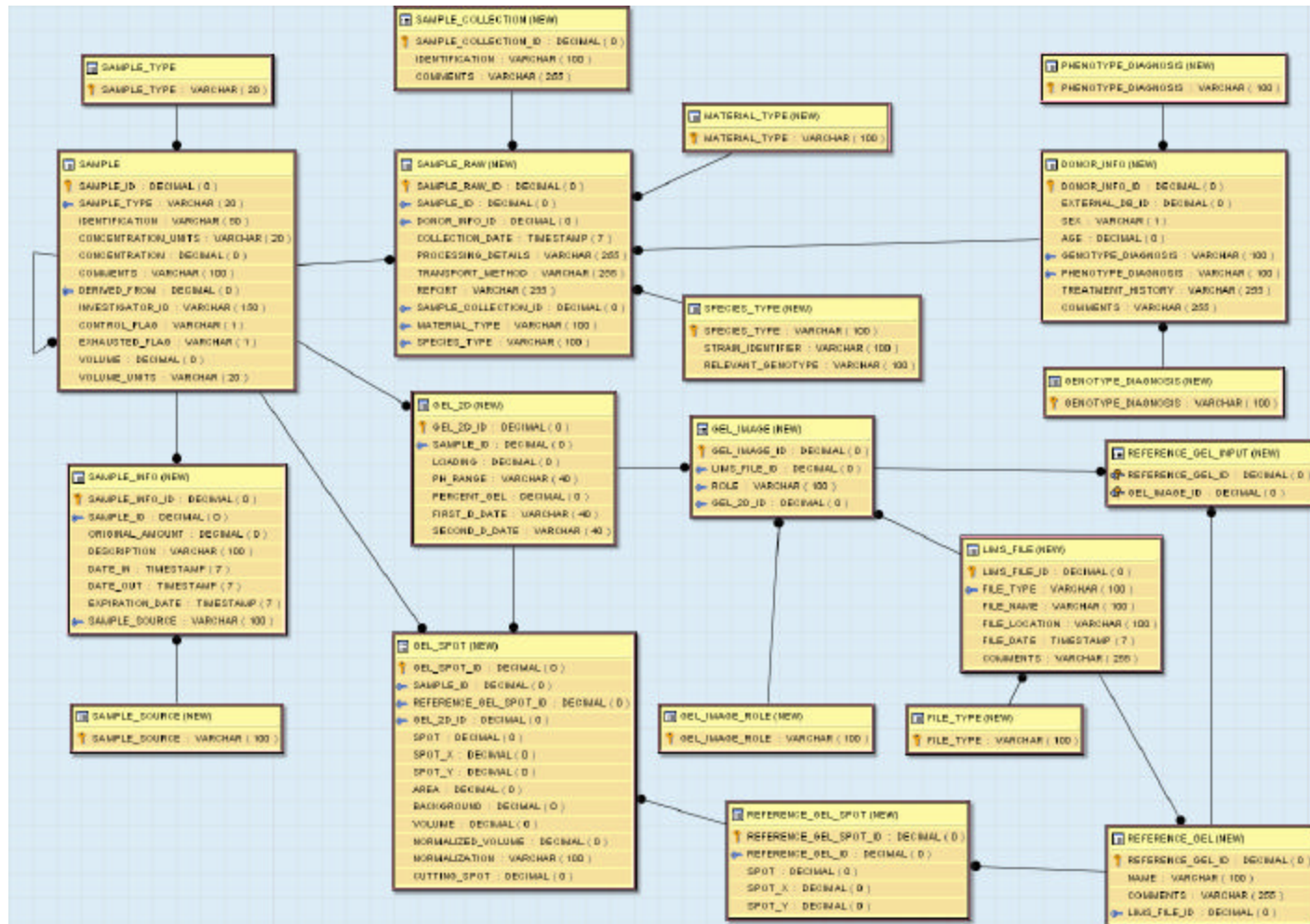
LIMS support

Entity Relationship Diagram



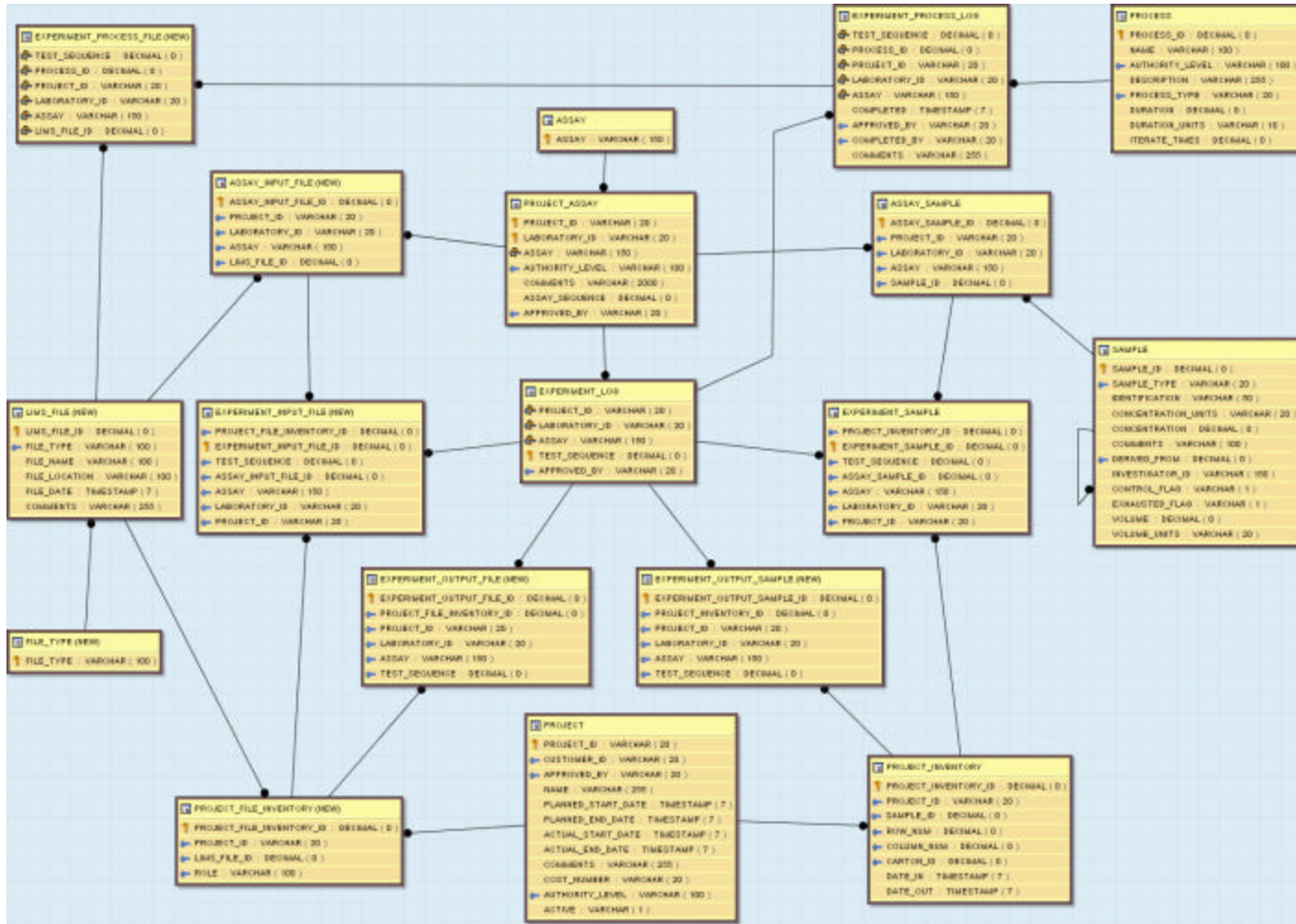
Entity Relationship Diagram

Sample



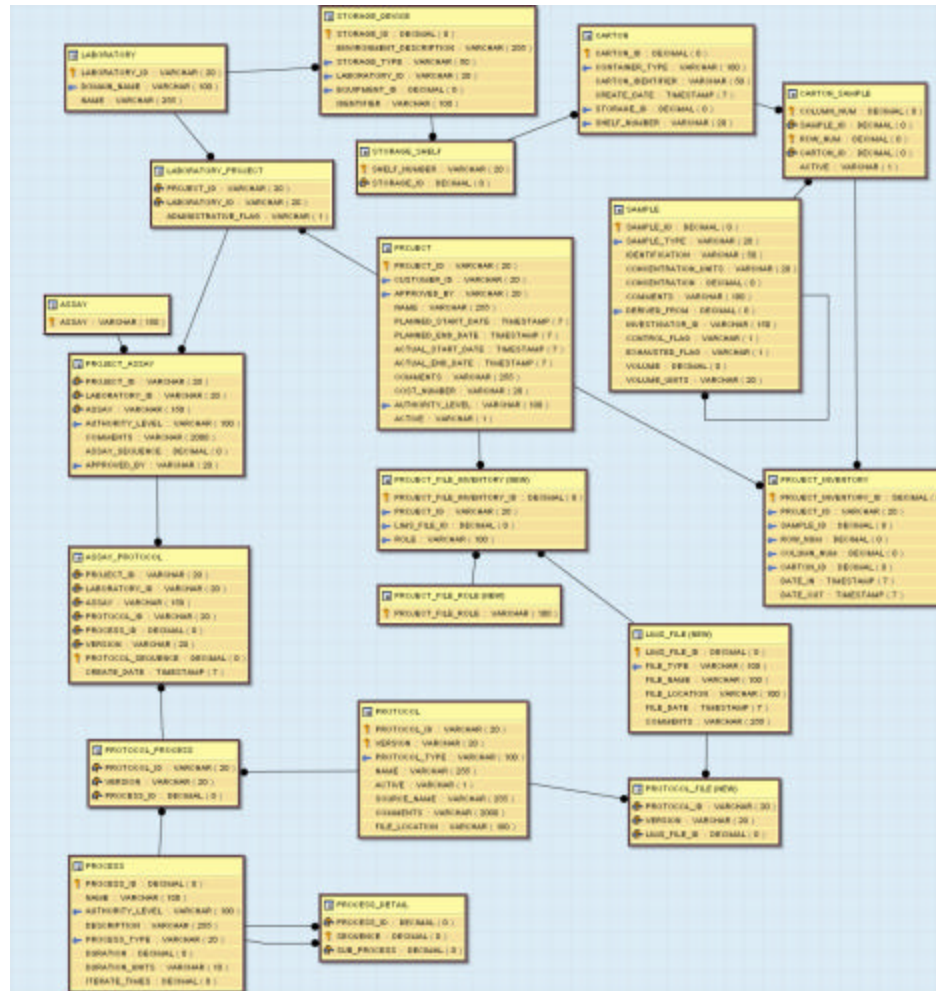
Entity Relationship Diagram

Experiment Design



Entity Relationship Diagram

Project Design



Samples and Files

The screenshot displays the ProtLIMS web application interface. At the top, a purple navigation bar contains the text '*** ProtLIMS ***' in the center, and 'Admin', 'Samples & Files', and 'Projects' as menu items. The 'Samples & Files' menu item is highlighted in red. Below the navigation bar, a left-hand sidebar is orange and contains a list of links: '*** Samples ***', 'Raw Samples', 'Generic Samples', '2D Gels', 'Reference Gels', 'Sample Spots', '*** Files ***', 'Protocol files', 'Gel images', and 'Data files'. The main content area has a light gray background. A yellow banner with the text 'Samples and Protocols' and 'Use links on your left to manage samples and files' is centered in the main area. At the bottom of the page, the text 'LIMS support' is displayed.

*** ProtLIMS ***

Admin Samples & Files Projects

*** Samples ***

- Raw Samples
- Generic Samples
- 2D Gels
- Reference Gels
- Sample Spots

*** Files ***

- Protocol files
- Gel images
- Data files

Samples and Protocols

Use links on your left to manage samples and files

LIMS support

Administration

*** ProtLIMS ***

[Admin](#) [Samples & Files](#) [Projects](#)

Direct Database access

Administration

Click link on your left to access proteomicsLIMS database via web interface

LIMS support

Projects

*** ProtLIMS ***

Admin Samples & Files **Projects**

*** GLEEVEC project ***

- Protein extraction
- 2DGel pH4-7
- 2DGel pH6-8
- 2DGel pH6-11
- Progenesis analysis
- Spot cutting

Projects

Use link on your left to navigate GLEEVEC project data

LIMS support

Proteomics Lab Workflow

